

Amendments to the Claims

Please amend Claims 18, 19, 25 and 31. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-17 (Canceled)

18. (Currently Amended) A functionalized polyazole comprising at least one recurring imidazole unit selected from the group consisting ~~from~~ of (1a), (1b), (1c), and (2):



and

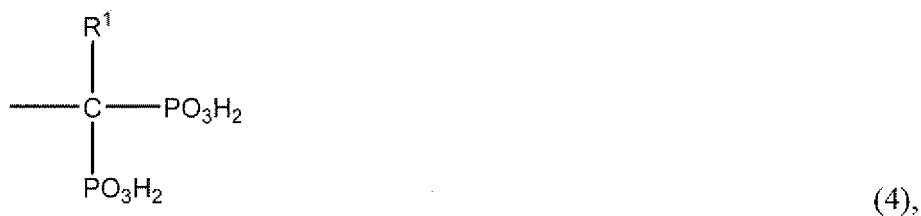


where the radicals Ar, Ar¹ and Ar² are tetravalent, divalent or trivalent aromatic or heteroaromatic groups,

Y is a bond or a group having from 1 to 20 carbon atoms,

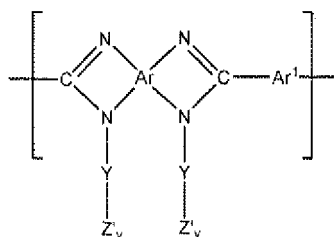
v is an integer from 1 to 10 and

Z is a group of the general formula

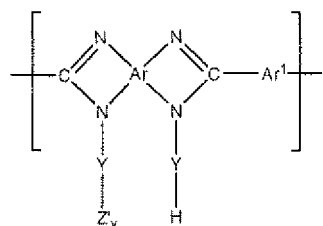


where each R¹ is independently of one another, a hydrogen atom or a group having from 1 to 20 carbon atoms, characterized in that the solubility of the polyazole in N,N-dimethylacetamide is at least 0.1 g, based on 100 g of solution, at 100°C.

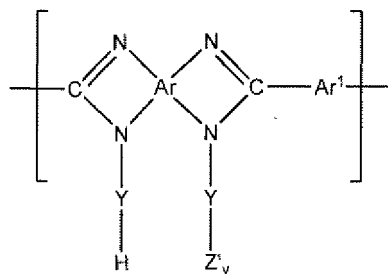
19. (Currently Amended) A functionalized polyazole comprising at least one recurring imidazole unit selected from the group consisting ~~from~~ of (1a), (1b), (1c), and [(2)] (2'):



(1a)



(1b)



(1c)

and



where the radicals Ar, Ar¹ and Ar² are tetravalent, divalent or trivalent aromatic or heteroaromatic groups,

Y is a bond or a group having from 1 to 20 carbon atoms,

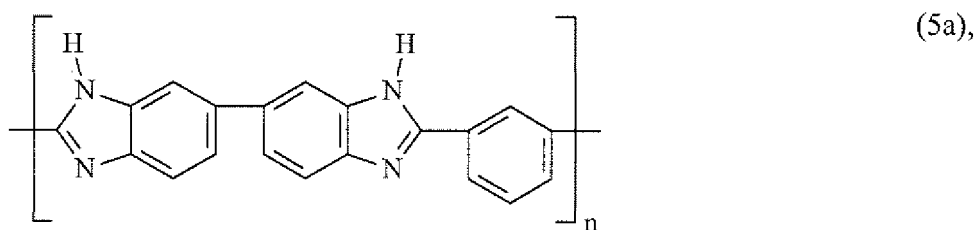
v is an integer from 1 to 10 and

Z' is a group of the general formula



where each R¹ is independently of one another, a hydrogen atom or a group having from 1 to 20 carbon atoms and R⁶ and R⁷ are each, independently of one another, a group having from 1 to 20 carbon atoms.

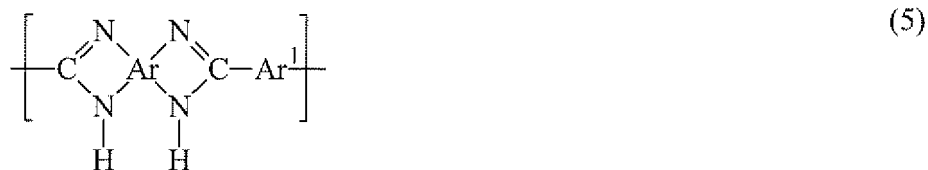
20. (Previously Presented) The functionalized polyazole of claim 18, further comprising recurring benzimidazole units of the formula (5a):



where n is an integer greater than or equal to 10.

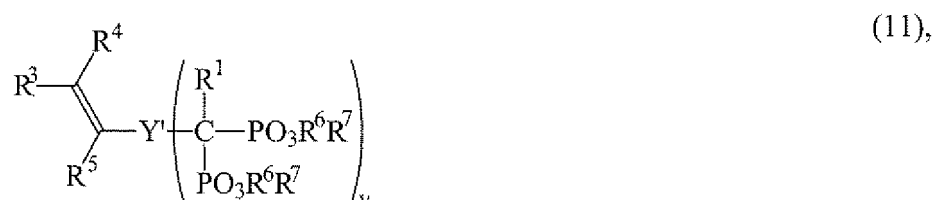
21. (Previously Presented) The polyazole of claim 18, characterized in that it is doped with an acid.

22. (Previously Presented) The polyazole as claimed in claim 21, characterized in that the degree of doping, expressed as mole of acid per mole of repeating units of the polymer, is from 3 to 15.
23. (Previously Presented) The polyazole of claim 18, characterized in that the group Y is a radical having 1 or 2 carbon atoms.
24. (Previously Presented) The polyazole of claim 18, characterized in that it has a molar ratio of phosphorus to nitrogen, P/N, measured by means of elemental analysis in the range from 0.02 to 0.5.
25. (Currently Amended) A process for preparing functionalized polyazoles of claim 19, comprising the steps of
- A) dissolving a polymer comprising a recurring imidazole unit selected from the units described by the general formulas (5) or (6):



in a solvent, to thereby form a first solution;

- B) reacting the first solution with a base to form a second solution,
- C) reacting the second solution with at least one phosphonate selected from (10) and (11)



wherein

Y is a bond or a group having from 1 to 20 carbon atoms;

v is an integer from 1 to 10;

each R^1 is independently of one another, a hydrogen atom or a group having from 1 to 20 carbon atoms;

R^3 , R^4 and R^5 are each, independently of one another, a hydrogen atom or a group having from 1 to 20 carbon atoms,

R^6 and R^7 are each, independently of one another, a hydrogen, or a group having from 1 to 20 carbon atoms,

X is a leaving group and

Y' is a bond or a group having from 1 to 20 carbon atoms.

26. (Previously Presented) The process of claim 25, further including adding an acid to the solution of step C.
27. (Previously Presented) The process of claim 25, further including adding a base having a pK_B at 25°C of less than 7 to the solvent in step A.

28. (Cancelled)
29. (Previously Presented) A polyazole obtainable by a process of claim 26.
30. (Previously Presented) A polymer electrolyte membrane coated with polyazoles of claim 18.
31. (Currently Amended) A membrane-electrode unit comprising ~~ionomers of polyazoles in a~~ polymer electrolyte membrane of claim 30.
32. (Previously Presented) A polymer electrolyte membrane comprising polyazoles of claim 18.
33. (Previously Presented) A membrane-electrode unit comprising a polymer electrolyte membrane of claim 32.
34. (Previously Presented) A fuel cell comprising a membrane-electrode unit of claim 33.
35. (Previously Presented) A membrane-electrode unit comprising ionomers of the polyazoles of claim 18.
36. (Previously Presented) A fuel cell comprising a membrane-electrode unit of claim 35.